PATENT COOPERATION TREATY

PCT

INTERNATIONAL PRELIMINARY EXAMINATION REPORT

(PCT Article 36 and Rule 70)

Applicant's or agent's file reference PWO-0920	**FOR FURTHER ACTION**	See Notification of Transmittal of International Preliminary Examination Report (Form PCT/IPEA/416)
International application No. PCT/CA 03/00459	International filing date *(day/month/year)* 31.03.2003	Priority date *(day/month/year)* 31.03.2003
International Patent Classification (IPC) or both national classification and IPC H04Q7/32		
Applicant RESEARCH IN MOTION LIMITED et al.		

1. This international preliminary examination report has been prepared by this International Preliminary Examining Authority and is transmitted to the applicant according to Article 36.

2. This REPORT consists of a total of 6 sheets, including this cover sheet.

   ☒ This report is also accompanied by ANNEXES, i.e. sheets of the description, claims and/or drawings which have been amended and are the basis for this report and/or sheets containing rectifications made before this Authority (see Rule 70.16 and Section 607 of the Administrative Instructions under the PCT).

   These annexes consist of a total of 3 sheets.

3. This report contains indications relating to the following items:

   - I ☒ Basis of the opinion
   - II ☐ Priority
   - III ☐ Non-establishment of opinion with regard to novelty, inventive step and industrial applicability
   - IV ☐ Lack of unity of invention
   - V ☒ Reasoned statement under Rule 66.2(a)(ii) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement
   - VI ☐ Certain documents cited
   - VII ☐ Certain defects in the international application
   - VIII ☐ Certain observations on the international application

Date of submission of the demand	Date of completion of this report
14.04.2004	09.05.2005
Name and mailing address of the international preliminary examining authority: European Patent Office - P.B. 5818 Patentlaan 2 NL-2280 HV Rijswijk - Pays Bas Tel. +31 70 340 - 2040 Tx: 31 651 epo nl Fax: +31 70 340 - 3016	Authorized Officer Poort, I Telephone No. +31 70 340-3871

INTERNATIONAL PRELIMINARY EXAMINATION REPORT

International application No. PCT/CA 03/00459

I. Basis of the report

1. With regard to the **elements** of the international application *(Replacement sheets which have been furnished to the receiving Office in response to an invitation under Article 14 are referred to in this report as "originally filed" and are not annexed to this report since they do not contain amendments (Rules 70.16 and 70.17))*:

Description, Pages

1-12 as originally filed

Claims, Numbers

1-19 received on 08.02.2005 with letter of 08.02.2005

Drawings, Sheets

1/8-8/8 as originally filed

2. With regard to the **language**, all the elements marked above were available or furnished to this Authority in the language in which the international application was filed, unless otherwise indicated under this item.

These elements were available or furnished to this Authority in the following language: , which is:

- ☐ the language of a translation furnished for the purposes of the international search (under Rule 23.1(b)).
- ☐ the language of publication of the international application (under Rule 48.3(b)).
- ☐ the language of a translation furnished for the purposes of international preliminary examination (under Rule 55.2 and/or 55.3).

3. With regard to any **nucleotide and/or amino acid sequence** disclosed in the international application, the international preliminary examination was carried out on the basis of the sequence listing:

- ☐ contained in the international application in written form.
- ☐ filed together with the international application in computer readable form.
- ☐ furnished subsequently to this Authority in written form.
- ☐ furnished subsequently to this Authority in computer readable form.
- ☐ The statement that the subsequently furnished written sequence listing does not go beyond the disclosure in the international application as filed has been furnished.
- ☐ The statement that the information recorded in computer readable form is identical to the written sequence listing has been furnished.

4. The amendments have resulted in the cancellation of:

- ☐ the description, pages:
- ☐ the claims, Nos.:
- ☐ the drawings, sheets:

5. ☐ This report has been established as if (some of) the amendments had not been made, since they have been considered to go beyond the disclosure as filed (Rule 70.2(c)).

   (Any replacement sheet containing such amendments must be referred to under item 1 and annexed to this report.)

6. Additional observations, if necessary:

V. Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

1. Statement

Novelty (N)	Yes:	Claims	1-19
	No:	Claims	
Inventive step (IS)	Yes:	Claims	
	No:	Claims	1-19
Industrial applicability (IA)	Yes:	Claims	1-19
	No:	Claims	

2. Citations and explanations

see separate sheet

Re Item V

Reasoned statement with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

Reference is made to the following documents:

D1: EP-A-0 486 089 (PHILIPS ELECTRONICS UK LTD ;KONINKL PHILIPS ELECTRONICS NV (NL)) 20 May 1992 (1992-05-20)
D2: US 2001/046861 A1 (BODIN JANNICK ET AL) 29 November 2001 (2001-11-29)
D3: EP-A-0 714 217 (NIPPON TELEGRAPH & TELEPHONE) 29 May 1996 (1996-05-29)

1. The present application does not meet the criteria of Article 33(1) PCT, because the subject-matter of claims 1 and 12 is not inventive in the sense of Article 33(2) PCT.

1.1 The document D1 discloses (the references in parentheses applying to this document) a method of connecting a mobile device to a network having associated channels, the method comprising:

scanning a selected subset of the associated channels (column 7, lines 15 to 29); and
establishing a connection between the mobile device and the network associated with one of the identified channels carrying an encoded signal (column 6, lines 4 to 9).

The subject-matter of claim1 therefore differs from this known method in D1 in that the method further comprises the steps of:
creating a list of potential channels carrying signals having power in excess of a predetermined threshold and
analysing each of the entries in the list of potential channels to identifiy channels carrying an encoded signal.

Thse features are merely normal design features which are frequently used in the methods for selecting a channel to connect to the network, as stated by the Applicant

in the description, see paragraph 4 of the present application (where the Applicant states that creating a list of the channels that contain GSM encoded signals and selecting the one with the highest power is included in a number of standards, including GSM standard 5.08), and see also paragraphs 12 to 16 and figures 1 to 4 of the present application, where the steps of creating a list of potential channels carrying signals having power in excess of a predetermined threshold (paragraph 13 of the present application) and analysing each of the entries in the list of potential channels to identifiy channels carrying an encoded signal (paragraph 14 of the present application) are described as steps belonging to known and used methods of connecting a mobile device to a network.

Therefore, the solution proposed in claim 1 of the present application cannot be considered as involving an inventive step (Article 33(3) PCT).

1.2 The same reasoning applies, mutatis mutandis, to the subject-matter of the corresponding independent claim 12, which therefore is also considered not inventive.

1.3 For the sake of completeness, it is pointed out that the subject matter of claim 1 is also not inventive over the disclosure of D2 (see paragraph 65 to paragraph 83).

3. The subject matter of dependent claims 2-11 and 13-19 do not appear to contain any additional features which, in combination with the features of any claim to which they refer, involve an inventive step for the following reasons:

The subject matter of claims 3, 4, 5, 11, 13, 17 is also disclosed in D1 (see column 7, lines 15 to 29 and column 9, lines 29 to 55).

The subject-matter corresponding to the additional features of claims 2, 6 to 10, 14 to 16, 18 and 19 either is in principle directly derivable from the disclosure of document D1 (see passages cited in the search report), or D3 (see in particular page 6, line 1 to page 7, line 10) or represents minor design details which are based on the general knowledge of the person skilled in the art of communication networks and related technologies.

Dependent **claims 2-11 and 13-19** therefore do not meet the requirements of the PCT in respect of inventive step.

What is claimed is:

1. A method of connecting a mobile device to a network having associated channels, the method comprising:

scanning a selected subset of the associated channels to create a list of potential channels carrying signals having power in excess of a predetermined threshold;

analysing each of the entries in the list of potential channels to identify channels carrying an encoded signal; and,

establishing a connection between the mobile device and the network associated with one of the identified channels carrying the encoded signal.

2. The method of claim 1, wherein the encoded signal is a GSM encoded signal and the network associated with the GSM encoded signal is a GSM network.

3. The method of claim 1, including steps of:

initialising a timer after scanning the selected subset when the step of analysing fails to identify channels carrying the encoded signal; and

waiting until expiry of the timer before scanning a next selected subset.

4. The method of claim 1, wherein a subsequently selected subset is distinct from a previously selected subset.

5. The method of claim 4, wherein the subsequently selected subset is complementary to the previously selected subset.

6. The method of claim 1 further including the step of assembling the complete list of channels carrying the encoded signal from all the associated channels prior to establishing the connection when the step of analysing identifies at least one channel carrying the encoded signal.

7. The method of claim 6, wherein the step of assembling the complete list of channels carrying the encoded signal includes scanning all channels in a frequency band to identify encoded signals.

8. The method of claim 6, wherein the step of assembling the complete list of channels carrying the encoded signal includes scanning a next selected subset of the associated channels, complementary to the selected subset of the associated channels, to identify the presence of the encoded signal.

9. The method of claim 6 wherein the step of establishing the connection includes registering the mobile device to the network with an associated encoded signal having the strongest power.

10. The method of claim 6 wherein the step of establishing the connection includes the step of registering the mobile device for emergency service to the network with an associated encoded signal having the strongest power.

11. The method of claim 3, wherein the selected subset of the associated channels corresponds to even numbered channels in a frequency band, and the next selected subset of the associated channels corresponds to odd numbered channels in the frequency band.

12. A mobile device for connecting to an accessible wireless network transmitting an encoded signal in at least one of a plurality of channels in a frequency band, the mobile device having a transceiver, comprising:

a channel subset selector for selecting a subset of the channels in the frequency band and for controlling the transceiver to scan the channels in the selected subset;

an encoded signal detector for identifying channels scanned by the transceiver carrying an encoded signal having power in excess of a predetermined threshold; and

a network device registrar for registering the mobile device on an accessible network associated with one of the identified channels carrying the encoded signal.

13. The mobile device of claim 12, further including a timer for initiating a delay if the encoded signal detector does not detect the encoded signal in the subset of the channels, and for instructing the channel subset selector to select a subsequent subset of the channels upon expiry of the delay.

14. The mobile device of claim 12, wherein the accessible wireless network transmits a GSM encoded signal, and the encoded signal detector is a GSM signal detector.

15. The mobile device of claim 12, wherein the encoded signal detector includes means for requesting a complementary subset of the channels when a channel carrying an encoded signal is identified.

16. The mobile device of claim 12, wherein the encoded signal detector includes means for requesting a complete subset of the channels when a channel carrying an encoded signal is identified.

17. The mobile device of claim 13, wherein the timer includes means for instructing the channel selector to select the subsequent subset of the channels upon expiry of the delay if the encoded signal detector did not identify a channel carrying the encoded signal.

18. The mobile device of claim 12, wherein the network device registrar includes means for registering the mobile device on the accessible network associated with the identified channel carrying the highest power encoded signal.

19. The mobile device of claim includes 12, wherein the network device registrar includes means for registering the mobile device on the network associated with the identified channel carrying the highest power encoded signal.